

**To:** Benson, Bob[Benson.Bob@epa.gov]; Foster, Althea[Foster.Althea@epa.gov]; Brobst, Bob[Brobst.Bob@epa.gov]; OBrien, Wendy[OBrien.Wendy@epa.gov]  
**Cc:** Griswold, Hays[Griswold.Hays@epa.gov]; Graham, Richard[Graham.Richardv@epa.gov]; McKean, Deborah[mckean.deborah@epa.gov]  
**From:** Way, Steven  
**Sent:** Mon 8/10/2015 2:36:53 PM  
**Subject:** RE: Questions about pretreatment

Bob,

Thanks. The mine water is being treated 8 to 10 miles upstream of the Animas. The receiving water is Cement Ck a very impaired water body not used for any form of water supply. It then enters the Animas below the Silverton's intake which is also not on the Animas.

Steven Way

Federal On-Scene Coordinator

Emergency Response Unit

US EPA - Region 8

1595 Wynkoop Street

Denver, CO 80202

Office: 303-312-6723

**From:** Benson, Bob  
**Sent:** Monday, August 10, 2015 8:06 AM  
**To:** Way, Steven; Foster, Althea; Brobst, Bob; OBrien, Wendy  
**Cc:** Griswold, Hays; Graham, Richard; McKean, Deborah  
**Subject:** RE: Questions about pretreatment

**Deliberative Process/Ex. 5**

# Deliberative Process/Ex. 5

## Deliberative Process/Ex. 5

# Deliberative Process/Ex. 5

**From:** Way, Steven

**Sent:** Sunday, August 09, 2015 9:31 PM

**To:** Foster, Althea

**Cc:** Griswold, Hays; Graham, Richard; McKean, Deborah; Benson, Bob

**Subject:** RE: Questions about pretreatment

Althea,

Here is the flocculent product information:

Brennfloc AP 2631, and is manufactured by Brentag (480-961-4189). The flocculent is a polyacrylamide based compound. Below is a link to an EPA fact sheet about acrylamide coagulants in drinking water.

Also I sent Ronnie information about the system in which we have used the flocculent for the temporary treatment activity. The treatment operations will likely change, but as temporary measure to drop the suspended metals compounds these compounds are being used.

As for the temporary settling pond retention times, I do not have that information right now. Collectively it is on the order of several hours as I understand it. The situation is dynamic, the flows continue to vary and operations are underway to route the mine water to other settling cells. Hopefully this information is sufficient for the time being.

<http://water.epa.gov/drink/contaminants/basicinformation/acrylamide.cfm>

Steven Way

Federal On-Scene Coordinator

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US EPA - Region 8

1595 Wynkoop Street

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**From:** Foster, Althea

**Sent:** Sunday, August 09, 2015 8:19 PM

**To:** Way, Steven

**Cc:** Crossland, Ronnie; Restivo, Angela; Webster, Susan; Petersen, Chris; Martin, John; Cristiano, Gina; Farris, Laura

**Subject:** Fwd: Questions about pretreatment

Steve,

We have been directed to you by your REOC as the point-of-contact who can help us answer the questions below. Can you help us?

Sent from my iPad

Begin forwarded message:

**From:** "Restivo, Angela" <[Restivo.Angela@epa.gov](mailto:Restivo.Angela@epa.gov)>  
**Date:** August 8, 2015 at 2:31:19 PM CDT  
**To:** "Crossland, Ronnie" <[Crossland.Ronnie@epa.gov](mailto:Crossland.Ronnie@epa.gov)>  
**Cc:** "Foster, Althea" <[Foster.Althea@epa.gov](mailto:Foster.Althea@epa.gov)>, "Webster, Susan" <[webster.susan@epa.gov](mailto:webster.susan@epa.gov)>, "Loesel, Matthew" <[loesel.matthew@epa.gov](mailto:loesel.matthew@epa.gov)>, "Petersen, Chris" <[petersen.chris@epa.gov](mailto:petersen.chris@epa.gov)>, "Martin, John" <[martin.john@epa.gov](mailto:martin.john@epa.gov)>, "Rauscher, Jon" <[Rauscher.Jon@epa.gov](mailto:Rauscher.Jon@epa.gov)>, "Turner, Philip" <[Turner.Philip@epa.gov](mailto:Turner.Philip@epa.gov)>, "Brown, Cynthia" <[Brown.Cynthia@epa.gov](mailto:Brown.Cynthia@epa.gov)>  
**Subject:** Questions about pretreatment

In order to plan for possible affect to drinking water systems and estimate when these systems should come back online the following questions need to be answered.

Specifically what type of coagulant is being used to treat the water?

Is the water being treated in the holding pond being released to the Animas River?

If so holding time for this releasing?

Is care being taken to ensure that floc is not leaving the treatment area?

Are samples of the treated water being collected?

Are they also conducting field monitoring for standard water quality parameters (pH, DO, turbidity, temp) prior to releasing?

Angela Restivo

Compliance Officer

Drinking Water Section

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